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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,105	01/31/2001	Daisuke Higuchi	Q62755	1202

7590

11/14/2002

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EXAMINER

CUEVAS, PEDRO J

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/774,105

Applicant(s)

HIGUCHI, DAISUKE

Examiner

Pedro J. Cuevas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 8-14 have been considered but are moot in view of the new ground(s) of rejection.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,892,418 to Asada et al. in view of U.S. Patent No. 5,427,456A to Hensel.

Asada et al. disclose the construction of a motor comprising:

a sintered bearing (25) for supporting an end of a shaft (22), in which lubricant oil (29) is contained;

a holder (26) for holding the bearing; and

a blocking wall member (24), which faces the bearing with a gap having a predetermined width in between; and

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wherein the gap is determined to such an extent that the splashed lubricant oil attached to the blocking wall member and depended therefrom returns again onto an outer circumferential wall of the bearing.

However, it fails to disclose:

- a boss having a center hole;

- a shaft having a first end and a second end, the first end press-fitted into the center hole; and

- a blocking wall member provided on the boss.

Hensel teach the construction of a fluid bearing with asymmetrical groove pattern having:

- a boss (26) having a center hole;

- a shaft (28) having a first end and a second end, the first end press-fitted into the center hole; and

- a blocking wall member (portion of boss (26) covered by film (46)) provided on the boss,

for the purpose of creating a net pressure gradient in hydrodynamic fluid from the capillary seal formed toward the dead end cavity housing the thrust plate near the bottom of the shaft.

It would have been obvious to one skilled in the art at the time the invention was made to use the boss, shaft, and blocking wall member disclosed by Hensel on the motor disclosed by Asada et al. for the purpose of creating a net pressure gradient in hydrodynamic fluid from the capillary seal formed toward the dead end cavity housing the thrust plate near the bottom of the shaft.

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5. With regards to claim 9, Asada et al. in view of Hensel disclose one end face of the boss faces one end face of the bearing; and wherein an annular recess is formed on the end face of the boss such that an outer circumferential wall of the annular recess serves as the blocking wall member.
6. With regards to claim 10, Asada et al. in view of Hensel disclose an outer circumferential wall of the annular recess that is arranged inner than an outer circumferential wall of the holder.
7. With regards to claim 11, Asada et al. in view of Hensel disclose a blocking wall member which extends in a direction of which the center hole extends so as to surround the outer circumferential face of the bearing.
8. With regards to claim 13, Asada et al. in view of Hensel disclose a gap which is determined to such an extent that the splashed lubricant oil adheres again onto the outer circumferential wall of the bearing.
9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,892,418 to Asada et al. in view of U.S. Patent No. 5,427,456A to Hensel as applied to claims 1-11 and 13-14, further in view of U.S. Patent No. 6,030,663 to McClain et al.

Asada et al. in view of Hensel disclose the construction of a motor as described above.

However, it fails to disclose the use of an oil repellant finishing applied onto the inner face of the blocking wall member.

McClain et al. teach the use of a fabric coating having oil repellant characteristics for the purpose of protecting textile fabrics from acquiring permanent oil stains.

It would have been obvious to one skilled in the art at the time the invention was made to use the coating having oil repellant characteristics disclosed by McClain et al. on the motor

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disclosed by Asada et al. in view of Hensel for the purpose of providing an oil repellant surface over the blocking wall member.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for

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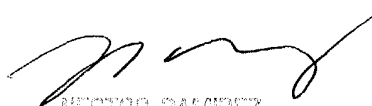
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the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 7, 2002


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000